

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An anion generator, comprising which includes
a casing,
an interior circuit,
an ion emitting head and
a discharge resistance;

Said said casing is composed of insulating case and conducting protective grille, the conducting protective grille is connected to a certain potential;

Said said interior circuit ~~is composed of~~ comprises a power circuit and oscillation boosting circuit, the power circuit provides operating power of the oscillation boosting circuit; the oscillation boosting circuit ~~is composed of~~ comprises an oscillation circuit, boosting circuit and multilevel dual voltage circuit, the function of oscillation boosting circuit is to generate high-tension used to ionize air through an ion emitting head;

Said said ion emitting head is a discharge probe or discharge brush; the ion emitting head is connected with the high-tension output terminal of the multilevel dual voltage circuit in the oscillation boosting circuit;

~~a wherein the~~ discharge resistance is ~~connected between~~ spaced from said conducting protective grille ~~and the interior circuit.~~

2. (Original) An anion generator as in claim 1, said conducting protective grille may be manufactured as a separate element, or be done integrally with other portion of the casing.

3. (Original) An anion generator as in claim 2, said conduction protective grille can be made of conductive metallic materials or semi-conducting materials, or else be made of other non-metallic materials treated by special process to have certain conductivity.

4. (Previously Presented) An anion generator as in claim 2, said boosting circuit is composed of a sheet piezoelectric ceramic transformer.

5. (Original) An anion generator as in claim 4, said power circuit includes AC power supply circuit and DC power supply circuit, between which there is a change-over switch, which can be switched to supply power for said oscillation boosting circuit.

6. (Original) An anion generator as in claim 5, said AC power supply circuit is composed of reduce-limiting current circuit, diode rectifier bridges and filter capacitor.

7. (Currently Amended) An anion generator as in claim 6, said oscillation circuit is ~~mainly composed of~~ comprises resistances, composite triodes and inductors;

as the loop capacitance of the oscillation circuit, the input capacitance of the sheet piezoelectric ceramic transformer of said boosting circuit is connected between the base electrode and collecting electrode of composite triode, so that the oscillation circuit with sheet piezoelectric ceramic transformer can form self-oscillation.

8. (Currently Amended) An anion generator as in claim 7, said multilevel dual voltage circuit is composed of diode ~~D7-D14 and capacity C7-C14~~ diodes and capacitors.

9. (Original) An anion generator as in claim 8, through a protective resistance, said ion emitting head is connected to the high-tension output terminal of multilevel dual voltage circuit in said oscillation boosting circuit.

10. (Previously Presented) An anion generator as in claim 3, said boosting circuit is composed of a sheet piezoelectric ceramic transformer.

11. (New) An anion generator as in claim 1, wherein the discharge resistance is connected to the conducting protective grille by a wire.

12. (New) An anion generator, comprising
a casing, said casing having conductive protecting grille, the conductive protecting grille is connected to a certain potential;
an interior circuit within the casing;
an ion emitting head attached to the interior circuit; and
a discharge resistance, the discharge resistance is connected to the conductive protecting grille by a wire.

13. (New) An anion generator as in claim 12, wherein said interior circuit comprises a power circuit and oscillation boosting circuit, the power circuit providing operating power of the oscillation boosting circuit;
the oscillation boosting circuit comprises an oscillation circuit, boosting circuit and multilevel dual voltage circuit.

14. (New) An anion generator, comprising
a casing, said casing having conductive protecting grille, the conductive protecting grille is connected to a certain potential;
an interior circuit within the casing;
an ion emitting head attached to the interior circuit and
means for maintaining the potential of the conductive protecting grille.

15. (New) An anion generator as in claim 14, wherein the means for maintaining the potential of the conductive protecting grille is a discharge resistance in the casing and electrically connected to the conductive protecting grille.